What Is Claimed Is:

1. A pressure sensor for measuring a gas pressure, comprising:

a pressure switch which is switched on or off as a function of a prevailing pressure; and

a resonant circuit connected to the pressure sensor switch, the resonant circuit configured to be opened and closed by the pressure switch.

2. A measuring system for a contactless measurement of a gas pressure, comprising:

a pressure sensor including a pressure switch and a resonant circuit, the pressure switch being connected to the resonant circuit, the resonant circuit configured to be opened or closed as a function of a prevailing pressure; and

a transmitter separately situated relative to the pressure sensor, the transmitter configured to excite the resonant circuit in a contactless manner and to evaluate a degree of absorption or a resonant response of the pressure sensor.

3. A measuring system for a contactless measurement of a gas pressure, comprising:

a plurality of pressure sensors, each of the sensors including a pressure switch and a resonant circuit, the pressure switch being connected to the resonant circuit, the resonant circuit configured to be opened or closed as a function of the prevailing pressure; and

a transmitter separately situated relative to the sensors, the transmitter configured to excite the resonant circuits in a contactless manner and to evaluate a degree of absorption or a resonant response of the pressure senses;

wherein each of the switches have a different switching threshold, and each of the resonant circuits have a different resonant frequency.

4. A measuring system for a contactless measurement of a gas pressure, comprising:

a plurality of pressure sensors, each of the sensors including a pressure switch and a resonant circuit, the pressure switch being connected to the resonant circuit, the resonant circuit configured to be opened or closed as a function of the prevailing pressure; and

a transmitter separately situated relative to the sensors, the transmitter configured to excite the resonant circuits in a contactless manner and to evaluate a degree of absorption or a resonant response of the pressure senses;

wherein at least two of the switches have the same switching thresholds but different resonant frequencies.

5. A micromechanical pressure switch for measuring a gas pressure comprising:

a semiconductor substrate having a recess with a first contact; and

a diaphragm having a second contact, the diaphragm spanning the recess.

6. The micromechanical pressure switch as recited in claim 5, wherein both the substrate and the diaphragm are produced from a semiconductor material.

7. The micromechanical pressure switch as recited in claim 5, wherein the diaphragm is formed from an epitaxial layer.

8. The micromechanical pressure switch as recited in claim 5, wherein the semiconductor substrate has a projection in the region of the recess which points in a direction of the diaphragm and upon which the first contact is situated.

9. The micromechanical pressure switch as recited in claim 5, wherein the recess includes a depression.

10. The micromechanical pressure switch as recited in claim 5,

wherein the recess is produced using a porous semiconductor technology.

11. A method for producing a micromechanical pressure switch from a semiconductor substrate, comprising:

introducing doping into the semiconductor substrate;

partially etching a doped region and producing a porous semiconductor region;

applying a layer to the semiconductor substrate, including the porous region, which forms a diaphragm for the pressure switch; and

rearranging the porous region by suitable process control so that a recess is formed, a portion of the porous region accumulating on the diaphragm and forming a first contact, and a portion of the porous region accumulating on the semiconductor substrate and forming a second contact.

12. The method as recited in claim 11, further comprising:

before the recess is produced, providing the semiconductor substrate with a second doping region which determines a peripheral extension of the recess in the semiconductor substrate.

13. The method as recited in claim 11, wherein the recess is produced using porous silicon technology.

14. The method as recited in claim 11, further comprising:

situating contact connections of the pressure switch on top of the layer.

15. The method as recited in claim 11, further comprising:

producing one of a projection pointing in the direction of the diaphragm, or a depression, in the recess.

16. A micromechanical pressure change sensor for measuring a gas pressure, comprising:

a semiconductor substrate having a recess;

a diaphragm which spans the recess; and

a pressure compensation arrangement via which the recess is connected to an outside environment.

17. The micromechanical pressure change sensor as recited in claim 16, wherein the recess in the semiconductor substrate is produced by porous etching.

18. The micromechanical pressure change sensor as recited in claim 16, wherein the arrangement for pressure compensation arrangement includes at least one pressure compensation channel formed in one of the semiconductor substrate or an epitaxial layer.

19. The micromechanical pressure change sensor as recited in claim 16, wherein the diaphragm is formed from an epitaxial layer.

20. The micromechanical pressure change sensor as recited in claim 16, wherein the pressure compensation arrangement is produced by partial etching, resulting in a porous region.

21. The micromechanical pressure change sensor as recited in claim 16, further comprising:

piezoresistive resistors provided on the diaphragm.

22. The micromechanical pressure change sensor as recited in claim 16, further comprising:

a projection pointing in a direction of the diaphragm and provided in the recess, the projection having a first contact, wherein a second contact is provided on an underside of the diaphragm which may be brought into contact with the first contact.